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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/045,455 | 11/07/2001 | Masaei Tsurumaki | 520373.90239 | 4308 |

26710 7590 04/10/2003

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EXAMINER

PASSANITI, SEBASTIANO

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

3711

DATE MAILED: 04/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

10/045,455

Applicant(s)

TSURUMAKI, MASAEI

Examiner

Sebastiano Passaniti

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This Office action is responsive to communication received 11/07/2001 – Information Disclosure Statement (IDS) and Priority papers filed.

Claims 1-7 are pending.

Following is an action on the MERITS:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson ('664) in view of Kobayashi ('998), Motomiya, Zebelean and Peterson. Anderson discloses the invention substantially as claimed and includes at least two distinct shell pieces attached together to form a club head structure and further including a grinding process to remove a thickness "t" from the metal shell. Anderson admits that the grinding somewhat reduces the depth of the grooves (50). Thus, it is clear that the thickness of the face is modified as a result of the grinding process. Anderson lacks an explicit showing of a shaft as well as a showing that the plurality of shell pieces includes a face shell, crown shell, sole shell and peripheral side shell. In addition, Anderson does not specifically mention "blast grinding". Each of Kobayashi, Motomiya and Zebelean show it to be old in the art to fabricate a hollow metallic club head using a plurality of shells that are subsequently welded or otherwise attached together. For example, Kobayashi shows distinct crown, face and sole/side shell pieces

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(Figure 4). For instance, Zebelean notes that the hollow club head may be formed of two or more pieces may be cast and secured together, with the number of parts directly affecting the cost of the operation (column 5, lines 29-37). By way of another example, Motomiya shows a variety of arrangements wherein the club head may comprise two or three shell pieces formed by forging or casting techniques (Figures 2, 3). Moreover, each of Kobayashi, Zebelean and Motomiya show attachment of the hollow shell to a shaft. In view of the patents to Kobayashi, Zebelean and Motomiya, it would have been obvious to modify the device in the cited art reference to Anderson by fabricating the club head from a plurality of shell pieces based upon the specific manufacturing process used and the cost constraints of the head. With respect to the specific, claimed "blast grinding", the reference to Peterson obviates the use of any one of a number of common finishing operations such as grinding and sand blasting (column 1, lines 57-65). As the applicant indicates that shot or sand material may be used in the blasting operation and since Peterson indicates that sand blasting and grinding are commonly used to improve the appearance of the head, it would have been obvious to simply take advantage of a blast grinding technique in place of the grinding format used by Anderson in order to make use of another commonly available finishing operation.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Helmstetter indicates that grinding may be used to provide a final shaping of the strike plate (col. 1, lines 53-58). Maltby uses a grinding operation on the sole plate to adjust the weight of the club and to inherently adjust the thickness of the sole (col. 2, lines 27-32 and 42-45). Zeider provides separate shell pieces formed


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through stamping and welded together. Zeider indicates a disadvantage with cast materials that must make use of grinding to provide a quality finish.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sebastiano Passaniti whose telephone number is 703-308-1006. The examiner can normally be reached on Mon-Fri (6:30-3:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Sewell can be reached on 703-308-2126. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3579 for regular communications and 703-308-7768 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.


Sebastiano Passaniti
Primary Examiner
Art Unit 3711

S.Passaniti/sp
April 4, 2003